STATEMENT OF BASIS

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0079278
to discharge to waters of the State of Louisiana.
AI No.: 19461 / Activity No.: PER20080001

THE APPLICANT IS: Lafayette Consolidated Government
P.O. Box 4017-C
Lafayette, LA 70502

THE FACILITY IS: South Water Treatment Plant
810 West Broussard Road
Lafayette, Lafayette Parish

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Bonnie Wascom

DATE PREPARED: July 16, 2008, revised May 26, 2009

1. PERMIT STATUS

A. LPDES permit – LA0079278
LPDES permit effective date: June 1, 2003
LPDES permit expiration date: May 31, 2008

B. LWDPS permit – NA
LWDPS permit effective date: NA
LWDPS permit expiration date: NA

C. Date Application Received: March 24, 2008

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY – potable water treatment plant

This is an existing facility, which treats 11 to 14 million gallons of raw groundwater per day. The raw water is pre-chlorinated, treated with alum and lime, then phosphate. The water is filtered, chlorinated, and stored or distributed to various rural water districts in the Lafayette Parish. The lime sludge is thickened and hauled by truck to agricultural sites for beneficial reuse. The facility also includes offices from which sanitary wastes are collected, treated, and discharged. The wastewater generated at this facility is discharged by multiple pipes to local drainage, thence to Coulee Ile des Cannes.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I
3. Wastewater Type: III
4. SIC codes: 4941, 4971

C. LOCATION - 810 West Broussard
Lafayette, Lafayette Parish
Latitude +30° 10' 48", Longitude -92° 05' 37"

3. OUTFALL INFORMATION

The site visit documented in the attached report was conducted on April 23, 2009 to collect and update information from the application submitted on July 26, 2008. The information gathered from this site visit was used in determining the characteristics of the existing outfalls.

RLP 1 Outfall 001

Discharge Type: Commingled low contamination potential storm water runoff from the sludge loading area, exterior vehicle wash wastewater, once-through pump seal water, and emergency (only) overflow from the sludge thickeners
Treatment: None
Location: at the point of discharge from the 30-inch discharge line west of the sludge tanks prior to mixing with other waters
Flow: 0.030 MGD
Discharge Route: by pipe to local drainage, thence to Coulee Ile des Cannes

RLP 2 Outfall 002

Discharge Type: Commingled turbidity meter wastewater, gallery washdown water and low contamination potential storm water runoff from the area adjacent to the lagoons
Treatment: Two settling lagoons operated in series
Location: at the point of discharge from the second lagoon weir prior to mixing with other waters
Flow: 0.130 MGD
Discharge Route: by pipe to local drainage, thence to Coulee Ile des Cannes

RLP 3 Outfall 003

Discharge Type: Commingled intermittent process overflow and low contamination storm water runoff and rinse water from the chemical loading dock
Treatment: oil/sediment trap

Location: at the point of discharge from the oil/sediment trap prior to mixing with other waters
Flow: 0.030 MGD
Discharge Route: by pipe to local drainage, thence to Coulee Ile des Cannes

RLP 4 Outfall 004

Discharge Type: Treated sanitary wastewater
Treatment: Extended aeration, clarification, and chlorination
Location: at the point of discharge from the mechanical wastewater treatment unit prior to mixing with other waters
Flow: 1,000 GPD
Discharge Route: by pipe to local drainage, thence to Coulee Ile des Cannes

RLP 5 Outfall 005

During the site visit conducted on April 23, 2009, a trail of lime residue was observed going to the chemical loading dock area storm drain. Due to contamination, this discharge is included in the permit as a regulated outfall.

Discharge Type: Chemical loading dock area storm water runoff
Treatment: None
Location: at the point of discharge from the storm drain south of the chemical loading dock prior to mixing with other waters
Flow: Variable
Discharge Route: by pipe to local drainage, thence to Coulee Ile des Cannes

4. RECEIVING WATERS

STREAM – Outfall 001, 002, 003, 004, and 005 – by pipe to local drainage, thence to Coulee Ile des Cannes, thence to the Vermilion River

BASIN AND SEGMENT – Vermilion-Teche River – Subsegment 060802

DESIGNATED USES -

a. Primary contact recreation
b. Secondary contact recreation
c. Propagation of fish and wildlife
d. Agriculture

5. EXISTING EFFLUENT LIMITS

1. **Outfall 001** – Intermittent discharge of commingled low contamination potential storm water runoff from the sludge loading area, once-through pump seal water, and emergency (only) overflow from the sludge thickeners and treated water storage tanks

Pollutant	Limitation Mo. Avg.: Daily Max.	Monitoring
Flow (MGD)	Report: Report	Monthly
TSS	----: 135 mg/L	Monthly
TOC	----: 50 mg/L	Monthly
Oil & Grease	----: 15 mg/L	Monthly
pH	6.0 - 9.0 s.u.	Monthly

2. **Outfall 002** – Intermittent discharge of commingled lagoon discharge and low contamination potential storm water runoff from the area adjacent to the lagoons

Pollutant	Limitation Mo. Avg.: Daily Max.	Monitoring
Flow (MGD)	--------: Report	Monthly
TSS	----: 135 mg/L	Monthly
Clarifying Agents	Report: Report	Monthly
pH	6.0 - 9.0 s.u.	Monthly

3. **Outfall 003** – Intermittent discharge of commingled low contamination potential storm water runoff from the chemical loading dock and the continuous discharge of once-through non-contact cooling water

Pollutant	Limitation Mo. Avg.: Daily Max.	Monitoring
Flow (MGD)	Report: Report	Monthly
TSS	----: 135	Monthly
TOC	----: 50	Monthly
Oil & Grease	----: 15	Monthly
pH	6.0 - 9.0 s.u.	Monthly

4. **Outfall 004** – Continuous discharge of treated sanitary wastewater

Pollutant	Limitation Mo. Avg.: Weekly Avg.	Monitoring
Flow (MGD)	Report: Report	Semiannually
BOD_5	30: 45 mg/L	Semiannually
TSS	30: 45 mg/L	Semiannually
Fecal Coliform	200: 400 col. /100 mL	Semiannually
pH	6.0 - 9.0 s.u.	Semiannually

6. PROPOSED EFFLUENT LIMITS

BASIS – See rationale below.

7. COMPLIANCE HISTORY/COMMENTS

A. Compliance History

A diesel spill occurred on September 8, 2006 due to a failed plastic fitting on the transfer pump. The spill was contained and cleaned up and did not enter state waterways.

An inspection performed on December 8, 2004, which noted no areas of concern.

B. DMR Review/Excursions

A DMR review was performed for the period of January 2005 – March 2009. For Outfall 001, 38 DMRs were reviewed with no reported excursions. For Outfall 002, 39 DMRs were reviewed with 1 pH and 4 TSS excursions reported. For Outfall 003, 38 DMRs were reviewed with 1 pH excursion reported. For Outfall 004, 7 DMRs were reviewed with 3 fecal coliform excursions.

Reported Exceedances				
Outfall	**Date**	**Parameter**	**Limit**	**Reported**
002	September 2007	TSS	135 mg/L	191 mg/L
	March 2007	pH	6-9 s.u.	9.3 s.u.
	May 2006	TSS	135 mg/L	4690 mg/L
	April 2006	TSS	135 mg/L	934 mg/L
	March 2006	TSS	135 mg/L	316 mg/L
003	March 2006	pH	6-9 s.u.	9.2 s.u.
004	April – June 2006	Fecal Coliform	200 col./100 mL	448 col./100 mL
	April – June 2006	Fecal Coliform	400 col./100 mL	>2000 col./100 mL
	July – Dec. 2008	Fecal Coliform	400 col./100 mL	13900 col./100 mL

8. ENDANGERED SPECIES

The receiving waterbodies and proposed discharge are not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

9. 303 (d) LISTED WATERBODIES

Subsegment 060802, Vermilion River - From LA-3073 bridge to ICWW, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060802 was previously listed as impaired for phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, suspended solids/ turbidity/ siltation, and Carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDL's and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL's have been established for Segment 060802:

Carbofuran

The TMDL for *Carbofuran in the Mermentau and Vermilion Teche River Basins* was final on March 21, 2002. No allocation was given to point source discharges in the Vermilion - Teche River Basin. According to the TMDL, there is only one point source in the Vermilion - Teche (FMC Corp. LA0064360) but it does not discharge Carbofuran. In addition, this facility has no potential to discharge Carbofuran. Therefore, requirements for Carbofuran will not be placed in this permit.

Suspended solids/turbidity/siltation

As per the *TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin*, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. Standard TSS limitations are included in this permit.

Pathogen Indicators

Per *The Vermilion River Fecal Coliform TMDL*, there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL. The

pathogen indicators impairment shall be addressed through the standard fecal coliform limitations in this permit.

Organic Enrichment/Low DO

Per the EPA's *Vermilion River Dissolved Oxygen and Nitrogen TMDL*, the limits apply to sanitary discharges, and process outfalls of food processors and seafood processors. For discharges less than 25,000 GPD, secondary limits shall apply as per the TMDL. The organic enrichment/low DO impairment shall be addressed through the TOC parameter for Outfall 001 and Outfall 003 and the BOD_5 parameter for Outfall 004.

Nitrogen

The *TMDL for Dissolved Oxygen and Nutrients in the Vermilion River* was final on April 5, 2001. No allocation was given to point source discharges in the Vermilion - Teche River Basin. LDEQ's position on nutrients, as supported by the ruling in Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. LAC 33:IX.2707.D.1.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through the TOC and BOD_5 limitations. Compliance with the TOC and BOD_5 limitations as the indicator parameters will result in the control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with effluent limitations of the permit in addition to LDEQs ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Other Conditions of the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

Phosphorus

As per the February 29, 2000 Delist (Federal Register Notice: Vol. 65, Num. 173, pages 54032-54034, 9/6/2000), assessment of new data and information shows this segment is meeting water quality standards for Phosphorus. Therefore, requirements for total phosphorus were not included in this permit.

10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.
Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

Rationale for South Water Treatment Plant

1. **RLP 1 Outfall 001** – Commingled low contamination potential storm water runoff from the sludge loading area, exterior vehicle wash wastewater, once-through pump seal water, and emergency (only) overflow from the sludge thickeners

Pollutant	Limitation* Mo. Avg.: Daily Max.	Reference
Flow (MGD)	Report: Report	LAC 33:IX.2361.I.1.b
TSS	---: 135 mg/L	Prior Permit (BPJ) (BAT)
TOC	---: 50 mg/L	LDEQ Storm water Guidance (BPJ)
Oil & Grease	---: 15 mg/L	LDEQ Storm water Guidance (BPJ)
pH	6.0 - 9.0 s.u.	Potable Water Treatment Plant General Permit

Treatment: None

***Monitoring Frequency:** Once per month for all parameters at the point of discharge from the 30-inch discharge line west of the sludge tanks prior to mixing with other waters.

Limits Justification: For all parameters, limits and monitoring frequencies are based on the prior permit, similar discharges, the Potable Water Treatment Plant General Permit (LAG380000), and current LDEQ Storm water Guidance.

2. **RLP 2 Outfall 002** – Commingled turbidity meter wastewater, gallery washdown water and low contamination potential storm water runoff from the area adjacent to the lagoons

Pollutant	Limitation* Mo. Avg.: Daily Max.	Reference
Flow (MGD)	Report: Report	LAC 33:IX.2361.I.1.b
TSS	----: 135 mg/L	Prior Permit (BPJ) (BAT)
Clarifying Agents (GPD)	Report: Report	Potable Water Treatment Plant General Permit
pH	6.0 - 9.0 s.u.	Potable Water Treatment Plant General Permit

Treatment: Two settling lagoons operated in series

***Monitoring Frequency:** Once per month for all parameters at the point of discharge from the second lagoon weir prior to mixing with other waters.

Limits Justification: For all parameters, limits and monitoring frequencies are based on the prior permit, similar discharges, the Potable Water Treatment Plant General Permit (LAG380000), and current LDEQ Storm water Guidance.

3. **RLP 3 Outfall 003** – Commingled intermittent process overflow and low contamination storm water runoff and rinse water from the chemical loading dock

Pollutant	Limitation* Mo. Avg.: Daily Max.	Reference
Flow (MGD)	Report: Report	LAC 33:IX.2361.I.1.b
TSS	---: 135 mg/L	Prior Permit (BPJ) (BAT)
TOC	----: 50 mg/L	LDEQ Storm water Guidance (BPJ)
Oil & Grease	----: 15 mg/L	LDEQ Storm water Guidance (BPJ)
pH	6.0 - 9.0 s.u.	Potable Water Treatment Plant General Permit

Treatment: Oil/sediment trap

***Monitoring Frequency:** Once per month for all parameters at the point of discharge from the oil/sediment trap prior to mixing with other waters.

Limits Justification: For all parameters, limits and monitoring frequencies are based on the prior permit, similar discharges, the Potable Water Treatment Plant General Permit (LAG380000), and current LDEQ Storm water Guidance.

4. **RLP 4 Outfall 004** – Treated sanitary wastewater

Pollutant	Limitation* Mo. Avg.: Daily Max.	Reference
Flow (GPD)	Report: Report	LAC 33:IX.2361.I.1.b
BOD_5	30: 45 mg/L	Class I Sanitary General Permit
TSS	30: 45 mg/L	Class I Sanitary General Permit
Fecal Coliform	200: 400 col. /100mL	Class I Sanitary General Permit
pH	6.0 - 9.0 s.u.	Class I Sanitary General Permit

Treatment: Mechanical wastewater treatment unit

***Monitoring Frequency:** Once per six months for all parameters at the point of discharge from the mechanical wastewater treatment unit prior to mixing with waters.

Limits Justification: For all parameters, limits and monitoring frequencies are based on the prior permit, similar discharges, and the Class I Sanitary General Permit (LAG530000). The fecal coliform limit has been changed from weekly average to daily maximum as per LAC33:IX.2709.D.

5. **RLP 5 Outfall 005** – Chemical loading dock area storm water runoff

Pollutant	Limitation* Mo. Avg.: Daily Max.	Reference
Flow (GPD)	Report: Report	LAC 33:IX.2361.I.1.b
TSS	---: 135 mg/L	Similar discharges
pH	6.0 - 9.0 s.u.	Similar discharges

Treatment: None

***Monitoring Frequency:** Once per three months for all parameters at the point of discharge from the storm drain south of the chemical loading dock prior to mixing with other waters.

Limits Justification: For all parameters limits and monitoring frequencies are based on similar discharges and current LDEQ Storm water Guidance.

NOTE: The Potable Water Treatment Plant General Permit does not apply to facilities producing discharges that are mixed with other, non-covered discharge types. The Potable Water Treatment Plant General Permit is not appropriate for this facility because the facility's process wastewaters commingle with low potential storm water, gallery wash down water, and exterior vehicle wash wastewater.

BPJ Best Professional Judgment
BAT Best Available Technology Economically Achievable
GPD Gallons per Day
MGD Million Gallons per Day
s.u. Standard Units

NOTE: For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

Storm Water Pollution Prevention Plan (SWP3) Requirement

Discharges from this facility are not classified as industrial storm water per LAC 33:IX.2341.B.14. Therefore, the Storm Water Pollution Prevention Plan (SWP3) requirement is not included in this permit.

However, per LAC 33:IX.903.B, all above ground storage tanks with a capacity of 660 gallons for an individual container or 1320 for multiple containers, must have secondary containment and a Spill Prevention and Control Plan.

Monitoring Frequency

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring

frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.